

Claims

1. A method of detecting the presence of anti-MHC antibodies in a sample comprising contacting said sample
5 with one or more recombinant MHC molecules or functionally equivalent variants, derivatives or fragments thereof and detecting the binding or absence of binding of antibodies to said recombinant MHC molecules, variants, derivatives or fragments thereof.
- 10 2. A method of detecting the presence of anti-HLA antibodies in a sample comprising contacting said sample with one or more recombinant HLA molecules or functionally equivalent variants, derivatives or
15 fragments thereof and detecting the binding or absence of binding of antibodies to said recombinant HLA molecules, variants, derivatives or fragments thereof.
- 20 3. The method as claimed in claim 1 or 2 wherein said MHC or HLA molecule is a Class I MHC or HLA molecule.
4. The method as claimed in claim 3 wherein the heavy chain of said MHC or HLA molecule is recombinant.
- 25 5. The method as claimed in claim 1 or 2 wherein the antibodies which are detected are IgG, IgM or IgA.
6. The method as claimed in claim 3 wherein said recombinant MHC or HLA molecule comprises a heavy chain,
30 β_2 -microglobulin and a peptide or functionally equivalent variant, derivative or fragment thereof.
7. A method as claimed in claim 6 wherein said peptide is derived from HIV, HCV or an influenza virus.
- 35 8. A method as claimed in claim 6 wherein said heavy chain is a variant provided with means for

immobilization.

9. The method of claim 1 wherein the MHC molecules are attached to a solid support.

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10. The method of claim 2 wherein the HLA molecules are attached to a solid support.

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11. The method of claim 9 or 10 wherein said solid support is a spherical bead.

12. The method of claim 9 or 10 wherein said solid support is a nitrocellulose strip.

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13. The method of claim 9 or 10 wherein said solid support is an ELISA plate.

14. The method of claim 1 wherein the recombinant MHC is synthesized in a prokaryotic expression system.

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15. The method of claim 2 wherein the recombinant HLA is synthesized in a prokaryotic expression system.

16. The method of claim 1 or claim 2 wherein the sample is a body fluid sample.

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17. The method as defined in claim 1 or claim 2 wherein the bound antibody is detected via an immunosorbent assay using an antibody conjugated to a signalling means.

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18. A single solid support carrying more than 2 different recombinant MHC molecules or functionally equivalent variants, derivatives or fragments thereof at discrete locations on said solid support.

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19. A method of depleting a sample of MHC molecule antibodies comprising at least the steps of contacting said sample with one or more recombinant MHC molecules or functionally equivalent variants, derivatives or fragments thereof, as defined in any one of claims 1 to 4, or 6 to 8 optionally attached to a solid support and removing at least the recombinant MHC molecules to which antibodies contained within the sample have bound

20. A kit comprising at least the following components:

- a) one or more recombinant MHC molecules or functionally equivalent variants, derivatives or fragments thereof;
- b) optionally a solid support, together with means for attachment of the MHC molecules; and
- c) a means for detecting anti-MHC-antibodies, preferably an antibody which binds to the complex formed between said MHC molecules and naturally occurring antibodies to said molecules.

21. A method as claimed in claim 19 wherein the solid support is a spherical bead.